



Dart Aerospace Ltd.
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C60

Job Sheet 195905



Part No: C60

Job Qty: 1 pcs

Part Name: C-Series Remote Hook 6,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 5/31/19

Job Tracking No:

Due Date: 7/16/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: C60 REV.C IPP REV:A 18.02.06 NEW ISSUE DD VERF:DP/IPP Rev. B 19.05.13 drawing revision DP Verify DD

Ship Via:

Order 16423

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	External Load - 1	1 pcs	7/16/19		0.30	0.25	External Load - 1		Madel 2019-8-16
							External Load - 2		
							External Load - 3		
110	External Load - 2 - B4B	1 pcs	7/16/19		0.30	4.00	External Load - 1 - B4B		Madel 2019-8-16
							External Load - 2 - B4B		
							External Load - 3 - B4B		
120	QC 5	1 pcs	7/16/19		0.00	0.00	QC 5 - 10		DAS 30 9-89 AUG 16 2019
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
130	Packaging 3-2 - Stock - B4B	1 pcs	7/16/19		0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		
							Packaging 3 - 7 - B4B		



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Container No: S197130



Part: C60

Job No: 195905

Serial No/Batch: S197130

Revision: C

Inspector:

Exp Date:

Instructions:

Date: 07/10/19

Plex 5/31/19 2:45 PM Dart.lajeunesse.marie

				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
140 QC 21 - SA	1 pcs	7/16/19	0.00 0.00	QC 21 - SA - 21	DAS
				QC 21 - SA - 70	21 AUG 16 2019
				QC 21 - SA - 53	9-89

Part Op 100 - Issue S/N.

Descriptions: 110 - (Small Fab)1- PICK C60-2-1 AND LASER ENGRAVE AS PER DWG . SEE NOTE 3 AND 4 ON SHEET 3. 2- ASSEMBLE AS PER DWG 3- PERFORM ALL NECESSARY TEST USING FAI TEST SHEET.

120 - QC5- Inspect part completeness to step on W/O)

130 - (Identify as per dwg & Stock Location: _____)

140 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
188-FPSS-1/4-20-3/8	Set Screw	2 Ea (2 ea)	100-External Load - 1	5048557
188-FSCS-1032-5/8	Flat socket cap Screw	4 Ea (4 ea)	110-External Load - 2 - B4B	5196435
32448	16-14 AWG Knife Connector	2 Ea (2 ea)	110-External Load - 2 - B4B	5041618
600.1309	Label	1 pcs (1 ea)	110-External Load - 2 - B4B	
600.1309-A	Label	1 pcs (1 ea)	110-External Load - 2 - B4B	5136710
7856K75	Heat Shrink Tubing Color Black	.5000 ft (.5 ea)	110-External Load - 2 - B4B	5190246
AN4-24A	Bolt	2 Ea (2 ea)	110-External Load - 2 - B4B	5183233
AN5-21A	Bolt	4 Ea (4 ea)	110-External Load - 2 - B4B	5097081-1
C10-41	Strain Relief Connector	1 Ea (1 ea)	110-External Load - 2 - B4B	5083917
C45-1-1	Manual Knob Release	1 pcs (1 ea)	110-External Load - 2 - B4B	5165654
C45-10-1	Lock Spring Pin	1 Ea (1 ea)	110-External Load - 2 - B4B	5040658

C45-11-2	Locating Pin	2 Ea (2 ea)	110-External Load - 2 - B4B	5097709
C45-12-1	Lock Bushing	2 pcs (2 ea)	110-External Load - 2 - B4B	5179711
C45-12-2	Lock Shaft	1 pcs (1 ea)	110-External Load - 2 - B4B	5163665
C45-12-4	Lock Roller	1 pcs (1 ea)	110-External Load - 2 - B4B	5178364
C45-12-5	Lock Roller Pin	1 pcs (1 ea)	110-External Load - 2 - B4B	5093171
P C45-12-6P	Retaining Ring	2 pcs (2 ea)	110-External Load - 2 - B4B	5029303
C45-13-1	Keeper Bushing	2 pcs (2 ea)	110-External Load - 2 - B4B	5182323
P C45-13-2	Teflon Keeper, Spacer	2 Ea (2 ea)	110-External Load - 2 - B4B	5029305
C45-13-3	Keeper Shaft	1 pcs (1 ea)	110-External Load - 2 - B4B	5170186
C45-13-4	Keeper	1 pcs (1 ea)	110-External Load - 2 - B4B	5170638
C45-13-5	Keeper Spring	1 pcs (1 ea)	110-External Load - 2 - B4B	5172439
C45-3-11	Actuator	1 pcs (1 ea)	110-External Load - 2 - B4B	5165546
C45-3-12	Latch Roller Bearing	1 Ea (1 ea)	110-External Load - 2 - B4B	5091768
C45-3-2	Latch Roller Pin	1 pcs (1 ea)	110-External Load - 2 - B4B	5182511
C45-3-2-1	Snap Ring	2 Ea (2 ea)	110-External Load - 2 - B4B	5097898
C45-3-3	Latch Roller	1 pcs (1 ea)	110-External Load - 2 - B4B	5127763
C45-3-4	Pin	2 pcs (2 ea)	110-External Load - 2 - B4B	5133668
C45-3-4-1	Retaining Ring	4 Ea (4 ea)	110-External Load - 2 - B4B	5114803
C45-3-5	Teflon Spacer	2 Ea (2 ea)	110-External Load - 2 - B4B	5097745
C45-3-6	Latch	1 pcs (1 ea)	110-External Load - 2 - B4B	5165714
P C45-3-7	Link	1 pcs (1 ea)	110-External Load - 2 - B4B	5029322
C45-3-8A	Actuator Shaft Bushing	1 pcs (1 ea)	110-External Load - 2 - B4B	5078570
C45-3-8B	Actuator Shaft Bushing	1 pcs (1 ea)	110-External Load - 2 - B4B	5182358
C45-3-9	Lever Spring	1 pcs (1 ea)	110-External Load - 2 - B4B	5190299
P C45-4-1	Trunnion Bushing	2 pcs (2 ea)	110-External Load - 2 - B4B	5122724
N C45-4-4A	C45 Load Beam Assembly	1 pcs (1 ea)	110-External Load - 2 - B4B	5195984
C45-4-5	Loadbeam Spacer	1 pcs (1 ea)	110-External Load - 2 - B4B	5163562
C45-5-1	Lever Stop Pin	1 Ea (1 ea)	110-External Load - 2 - B4B	5089113
C45-5-2	Lever Stop	1 pcs (1 ea)	110-External Load - 2 - B4B	5175808
C45-7-1	LOADBEAM BUMPER	1 pcs (1 ea)	110-External Load - 2 - B4B	5177835
C45-7-2	Lock Bumper	2 pcs (2 ea)	110-External Load - 2 - B4B	5179118
C45-8-1-2	Solenoid Nut	2 pcs (2 ea)	110-External Load - 2 - B4B	5175565
C45-8-2	Solenoid	1 pcs (1 ea)	110-External Load - 2 - B4B	5193988
C45-8-4	Solenoid Cover Gasket	1 pcs (1 ea)	110-External Load - 2 - B4B	5171779
C45-8-5	Solenoid Cover	1 pcs (1 ea)	110-External Load - 2 - B4B	5175959

C45-9-1	Clock Spring Cover	1 pcs (1 ea)	110-External Load - 2 - B4B	5167968
C45-9-2	Clock Spring	1 pcs (1 ea)	110-External Load - 2 - B4B	5107946
C60-10-2	Lock Spring	1 pcs (1 ea)	110-External Load - 2 - B4B	5076648
C60-11-1	Side Plate Solenoid	1 pcs (1 ea)	110-External Load - 2 - B4B	5062199
C60-12-3	Lock	1 pcs (1 ea)	110-External Load - 2 - B4B	5029342
C60-2-1	Side Plate	1 pcs (1 ea)	110-External Load - 2 - B4B	5029450
C60-3-1	Radial Bearing	2 Ea (2 ea)	110-External Load - 2 - B4B	5100180
P C60-3-10	Latch Shaft	1 pcs (1 ea)	110-External Load - 2 - B4B	5029345
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	110-External Load - 2 - B4B	5097886
EL314-SJTOW	Long Line Electrical Wire, 14/3 Gauge replace w/t 01004-08-047	1 ft (1 ea)	110-External Load - 2 - B4B	5179682
MS21044N5	Nut	4 Ea (4 ea)	110-External Load - 2 - B4B	5192486
MS27039-4-08	Screw	1 Ea (1 ea)	110-External Load - 2 - B4B	5097087-1
NAS1149F0463P	Washer	3 Ea (3 ea)	110-External Load - 2 - B4B	5097088-1
NAS1149F0563P	Washer	8 Ea (8 ea)	110-External Load - 2 - B4B	5184942

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-External Load - 1	188-FPSS-1/4-20-3/8	2	82	0
110-External Load - 2 - B4B	188-FSCS-1032-5/8	4	143	0
	32448	2	185	0
	600.1309	1	0	0
	600.1309-A	1	84	0
	7856K75	1	21	0
	AN4-24A	2	33	0
	AN5-21A	4	324	0
	C10-41	1	14	0
	C45-1-1	1	12	0
	C45-10-1	1	160	0
	C45-11-2	2	43	0
	C45-12-1	2	60	0
	C45-12-2	1	16	0
	C45-12-4	1	62	0
	C45-12-5	1	39	0
	C45-12-6P	2	351	0
	C45-13-1	2	30	0
	C45-13-2	2	48	0
	C45-13-3	1	26	0
	C45-13-4	1	15	0
	C45-13-5	1	101	0
	C45-3-11	1	26	0
	C45-3-12	1	76	0
	C45-3-2	1	40	0
	C45-3-2-1	2	83	0
	C45-3-3	1	18	0
	C45-3-4	2	42	0
	C45-3-4-1	4	117	0
	C45-3-5	2	95	0
	C45-3-6	1	17	0
	C45-3-7 P	1	0	0
	C45-3-8A	1	20	0
	C45-3-8B	1	37	0
	C45-3-9	1	21	0
	C45-4-1- P0	2	20	0
	C45-4-4A	1	6	0
	C45-4-5	1	12	0
	C45-5-1	1	39	0
	C45-5-2	1	34	0
	C45-7-1	1	28	0
	C45-7-2	2	38	0
	C45-8-1-2	2	67	0
	C45-8-2	1	0	0
	C45-8-4	1	15	0
	C45-8-5	1	37	0
	C45-9-1	1	17	0
	C45-9-2	1	38	0
	C60-10-2	1	36	0
	C60-11-1 P	1	0	0
	C60-12-3	1	0	0
	C60-2-1 P	1	0	0
	C60-3-1	2	52	0
	C60-3-10 P	1	0	0
	EL-PLUG-M	1	29	0
	EL314-SJTOW - 01004-08-0P	1	0	0
	MS21044N5	4	49	0
	MS27039-4-08	1	214	0
	NAS1149F0463P	3	346	0
	NAS1149F0563P	8	399	0

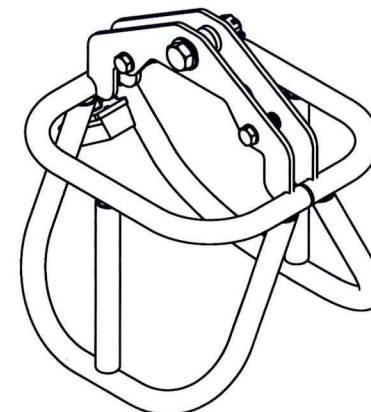
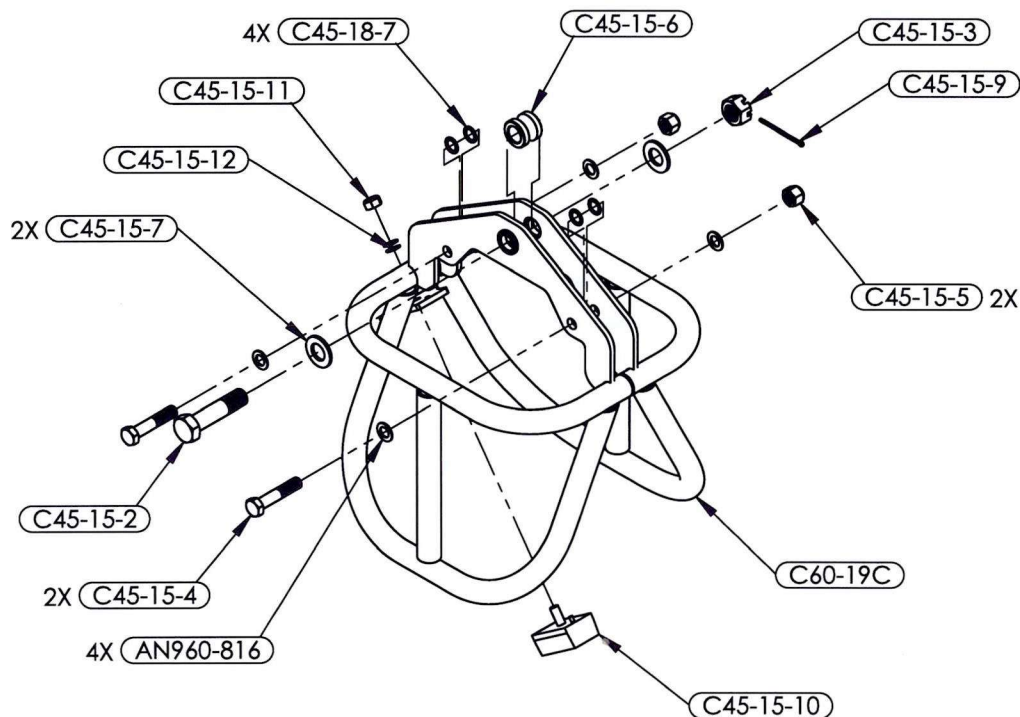
DAG
21
9-88

Part Specifications

Specifications could not be found.

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		AS DRAWN BY APICAL.	11/6/2012	JAG	
3	15-0181	UPDATED TO NEW DRAFTING STANDARDS. CH'D P/N WAS C45-15-8 IS AN960-816. C45-18-7 ADDED TO BOM QTY 4.	7/22/2015	DPD	JAG



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WITHOUT NOTICE
WORK ORDER
NO. 195905 MLC
1906-03

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS
			C60-19C	1	WELDMENT		
			C45-15-2	1	LIFTING BOLT	STEEL	
		B/O	C45-15-3	1	CASTLE NUT	STEEL	3/4-16 (MCMASTER-CARR #95030A270)
		B/O	C45-15-4	2	CAGE BOLT	STEEL	1/2-20 X 2-1/2, GRADE 8 (MCMASTER-CARR #91257A750)
		B/O	C45-15-5	2	CAGE BOLT NUT	STEEL	1/2-20 LOCKNUT, GRADE 8 (MCMASTER-CARR #97135A255)
			C45-15-6	1	LIFTING BUSHING	4140/4142	
		B/O	C45-15-7	2	LIFTING BOLT WASHER	STEEL	3/4 (MCMASTER-CARR #98023A036)
		B/O	C45-15-9	1	COTTER PIN	S.S	Ø1/8 X 2-1/2 (MCMASTER-CARR #98401A481)
			C45-15-10	1	FORD BUMPER		
		B/O	C45-15-11	1	CAGE BUMPER NUT	STEEL	M10, CLASS 8 (MCMASTER-CARR #90576A118)
		B/O	C45-15-12	1	CAGE BUMPER WASHER	STEEL	3/8 (MCMASTER-CARR #91074A131)
		B/O	C45-18-7	4	SHIM	STEEL	.025 X Ø.511 I.D. (MCMASTER-CARR #3088A412)
		B/O	AN960-816	4	LIFTING BOLT WASHER	STEEL	Ø1/2

DART AEROSPACE	
TITLE C60 CAGE	
DWG NO. C60-C	
REV 3	
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: APICAL APPROVED: D Weil HEAT TREAT FINISH SPEC USED ON MODEL	
SCALE 1:8	DATE 2/15/2002 SHEET 1 OF 1

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Remote Cargo Hook Test Form

C60

Work Order 195905

Customer Order 16423

Serial Number 5197130

Date 2019-8-16

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	15,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	Pass
10	3,000	Electircal, 25 volts	No "hang ups" permitted	N/A	Pass
2	6,000	Electircal, 22 volts	Current shall not exceed 12.4A	9.8 Amp.	Pass
2	4,500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	Pass
2	3,000	Electircal, 22 volts	Current shall not exceed 12.4A	8.9 Amp.	Pass
2	1,500	Electircal, 22 volts	Current shall not exceed 12.4A	8.9 Amp.	Pass
2	500	Electircal, 22 volts	Current shall not exceed 12.4A	8.8 Amp.	Pass
1	6,000	Electircal, 20 volts	Current shall not exceed 11.3A	7.9 Amp.	Pass
1	6,000	Electircal, 28 volts	Current shall not exceed 15.8A	11.3 Amp.	Pass
1	6,000	Manual		N/A	Pass
1	6,000	Impact Test	Impact shackle 10 times, shall not release	N/A	Pass
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	1.9 Ohms	Pass
1	N/A	Electircal Continuity	Across both wires	N/A	Pass

Test Conducted By Michel Lalonde

Signature: [Signature]
QC 5 Small FAB / QA

Submit